The Sculpture of Ruth Asawa

Contours in the Air

Educator's Guide

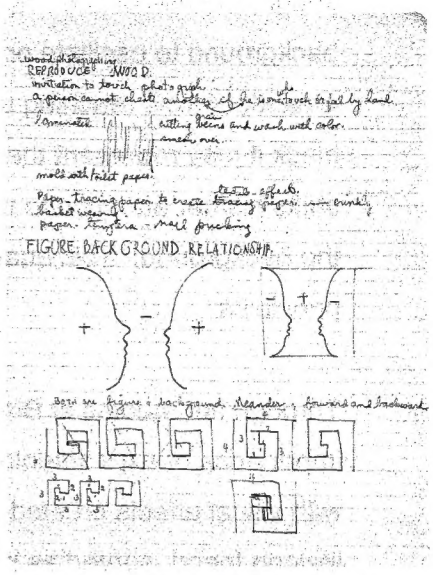
Forward

Long revered as a local treasure, Ruth Asawa is known throughout the Bay Area for her public commissions and as a tireless advocate for arts education. The multiple public sculptures scattered from San Francisco to Santa Rosa and the vital arts programs at Alvarado Elementary School and the School of the Arts in San Francisco stand as indelible markers of Asawa's commitment to education and community. As a practicing artist, Asawa defined her process through experimentation and the studied exploration of material. The retrospective, entitled *The Sculpture of Ruth Asawa: Contours in the Air*, highlights the national significance of Asawa's personal artistic vocabulary, spanning her early work at Black Mountain College to her monumental wire sculptures.

About This Study Guide

This study guide offers a general overview of Asawa's artistic training and the multiple processes she employed during her career. The guide follows the gallery sequence as the exhibition is installed at the de Young. Please adapt the background information for the grade level that you teach. The bold headings in the guide represent the major gallery themes. Following each section you will find "Thought Questions and Activities." These ideas are intended to help structure your visit and aid your students in their exploration of Asawa's work. We suggest that you create a **gallery worksheet** for your students employing the questions you find to be developmentally appropriate. The art based lesson plans at the end of the guide are general exercises to help students understand the foundational principles of Asawa's sculpture: figure – ground relationships, layering, and transparency. We suggest that students be introduced to Asawa's work through a pre-visit activity such as the Figure/Ground exercise included in this guide. After students visit the museum and study Asawa's work in person, the additional activities provide students with the opportunity to experiment with Asawa's varied sculptural styles.

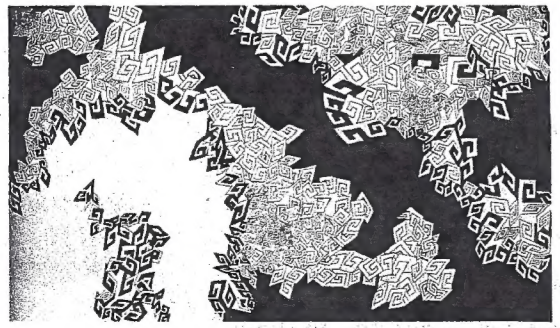
Asawa encountered the aesthetic and philosophical principles that shaped her artistic vocabulary.



Black Mountain College Lecture Notes On Figure-Background Relationships

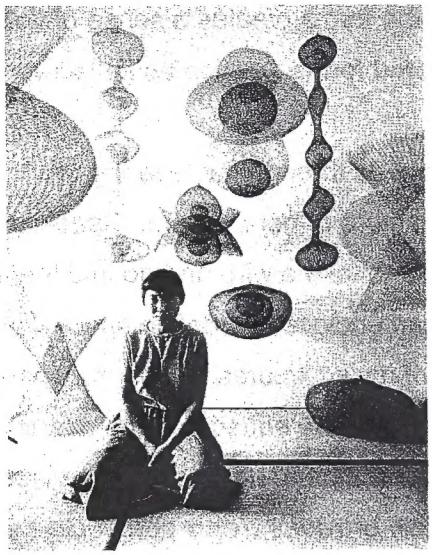
Black Mountain College was an experimental institution influenced by the writings of the educational reformer John Dewey, who believed in the communal shaping of knowledge and the primacy of the creative arts within a liberal-arts education. During the 1940s and early 1950s the institution was a veritable who's who of contemporary art. Individuals such as Willem de Kooning, Jacob Lawrence, John Cage, Robert Rauschenberg, Merce Cunningham, and Buckminster Fuller all participated in the communal learning environment at Black Mountain. As described by Black Mountain scholar, Mary Emma Harris, "Black Mountain College had evolved into a unique learning environment, incorporating characteristics of a summer camp, a rural work school, an art colony, a religious retreat, a pioneering village, and the liberal arts college it was intended to be."[2] The faculty and students alike lived and worked together to maintain the institution.

Josef Albers, who had trained and taught at the Bauhaus in Germany, headed the Art Department at Black Mountain. His method of teaching left the most lasting impression on Asawa's artistic formation. Through his teaching, Albers stressed an economy of means and challenged his students to push materials beyond their given properties to create unexpected outcomes. Asawa's Black Mountain work attests to the sustained study of formal techniques like the study of line evidenced by drawing exercises and the manipulation of space achieved through positive and negative or figure - ground compositions. As stated by Albers, figure – ground studies demonstrate a "double meaning and multiple reading of visual form. For us it points at artistic potentiality by recommending ambiguity in performance and the economic ratio of effort to effect as measure."[3] Looking at a composition such


Meander Straight Lines (BMC. 59), Ca. 1948, Ink on Paper, 7 7/8 x 13 1/2 in.

[2] Mary Emma Harris, "Black Mountain College" in *The Sculpture of Ruth Asawa*, ed. Daniell Cornell, (Berkeley: University of California Press, 2006) 43.
[3] Josef Albers, *Search Versus Re-Search* (Hartford: Trinity College Press, 1969), 36.

Mountain, she continued to experiment with the technique creating baskets such as the examples pictured at right, which measure six to nineteen inches in diameter.

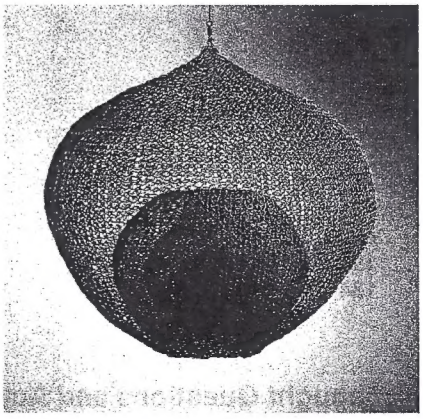


Life Magazine Feature, 1954.
Photograph by Nat Farbman

Eventually, Asawa began to experiment with closing the forms to create long pendulous sculptures constructed from a single strand of wire. Within Asawa's artistic vocabulary, wire represents a three dimensional line, which she uses to draw forms in the air. Asawa has stated, "I was interested in…the economy of line, making something in space, enclosing it without blocking it out, it's still transparent, I realized that if I was going to make these forms, which interlock and interweave, it can only be done with a line because a line can go anywhere."[5]

The calligraphic quality of her work relies heavily on one of Asawa's earliest innovations. By hanging her sculptures from the ceiling, Asawa liberated her forms from the traditional base equated with sculptural display. In doing so, Asawa created forms that inhabit space and physically interact with the viewer as he/she moves around or underneath the work to gain different perspectives.

As Asawa experimented with the looped technique, she also began to layer or interlock shapes within her sculptures. Through the use of layering, Asawa transferred the spatial play evidenced in her figure – ground studies to a three-dimensional form. When studying either her circular nested sculptures, termed "form within a form," or her long interconnected works, the surfaces continually shift forcing the eye to renegotiate the spatial relationships of the piece. As the eye traces a "form within a form" sculpture such as *Untitled* (S.095), which Asawa created by working from the interior to the exterior, the outer



Untitled (S.095), Early 1950s, Iron Wire, 15 1/2 x 17 x 17 in.

[5] Daniell Cornell, "The Art of Space: Ruth Asawa's Sculptural Installations," in *The Sculpture of Ruth Asawa*, ed. Daniell Cornell, (Berkeley: University of California Press, 2006) 138.

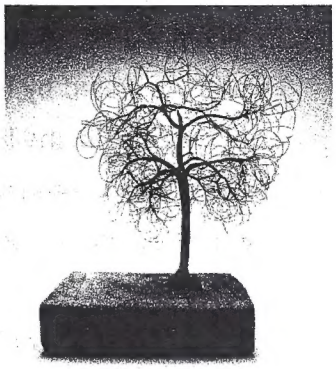
outside and changes to the inside and back again to the outside. How many intersections do you encounter?

3. Is it easier to know how a sculpture was made by looking at the work or by looking at the shadow created by the form? Explain why.

NOTE: If your students will be designing their own looped wire forms, you might want them to spend some extra time in this gallery sketching any ideas that come to mind.

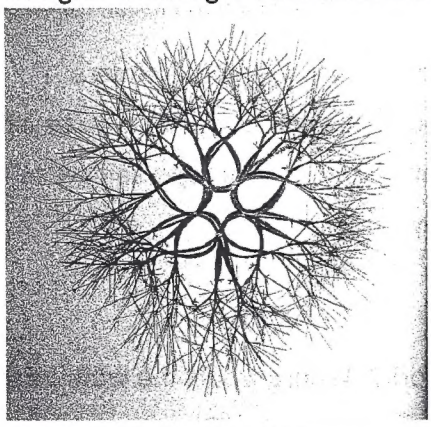
Asawa's Tied Wire Forms

The tied wire forms vividly reflect Asawa's commitment to exploration and experimentation of form and material. In 1962, Asawa received a desert plant from friends who had been traveling through Death Valley. Unable to draw the plant, Asawa decided to first construct the form attempting to grasp the growth patterns of the plant. She rooted a bundle of wires to a wooden base and began to divide the wires creating the delicate branched extensions of the bush.



Untitled (S.058), 1961, Naturally Oxidized Brass Wire Mounted on a Driftwood Base, 18 x 13 3/4 x 12 1/4 in.

From this early experimentation, Asawa began to expand her designs focusing on the inherent qualities of wire: flexibility and line. Her tied wire forms also stress a sense of growth, as the forms extend out from the concentrated core of wires continually dividing to create a complex exterior web. The construction of Asawa's tied wire forms offers a variation on the spatial relationship seen in her looped forms. As the line of her looped sculptures both contains and collapses space, Asawa's tied wire forms commence with a concentrated core of material that expands and overlaps as it moves outward. By condensing her use of material, Asawa's tied wire forms focus the eye on a central void, from which the material surrounds and extends.



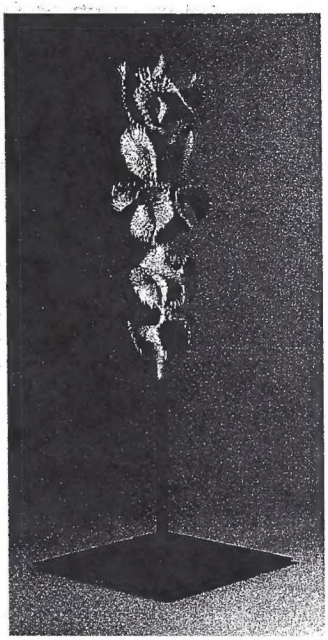
Untitled (S.355), ca. 1965, Bronze Wire with Copper Ties, 20 1/2 x 33 x 33 in.

Thought Questions and Activities:

1. What other forms in nature do you think resemble Asawa's tied wire forms?
2. Compare and contrast how different tied wire sculptures begin. What shapes do you notice at the center of each sculpture?

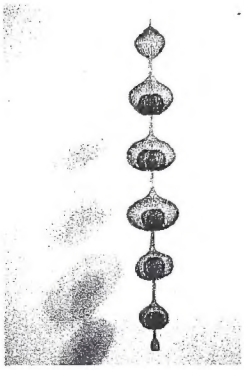
Experimentation

Throughout Asawa's career, drawing played a crucial role in her development of form. In relation to her concern with economy of means, Asawa recently stated that the sketchbook requires the least amount of materials. Where many artists create drawings as a preliminary plan for future work, Asawa typically drew from her completed sculptures, studying the form for future ideas. In this way her sculpture, drawings, and lithographs represent a prolonged conversation regarding the representation of form.



Untitled (S.203), Early 1970s, Bronze, Naturally Weathered Green Patina, 40 x 13 1/2 x 13 1/2 in

During the 1950s and 60s, Asawa also began to experiment with electroplating and casting her sculptures. Typically electroplating was used to create a smooth steel surface, however, Asawa decided to reverse the current and see what effects might be achieved. Using a simple tied wire from, the reversed current caused the wires to bubble and fuse, creating a surface that accentuated the organic quality of the form and greatly pleased Asawa. Ultimately, the process rendered the forms too brittle, and Asawa abandoned the process after a few years. In an attempt to capture and stabilize the surface quality of the electroplated forms, Asawa began to cast her works in bronze. Asawa applied layers of wax to a looped wire sculpture to create the cast bronze mermaid's tail for the Ghirardelli fountain.



Untitled (S.294), ca. 1978, Copper Wire, 33 x 5 1/2 x 5 1/2 in.

Asawa also experimented with the scale of her looped wire sculptures, creating miniature forms. The artist executed these works as a technical challenge. These forms offer a stunning example of the artist's skill and demonstrate a continued investigation regarding the economy of means and the function of line. As stated by the artist, "size does not define the importance of an idea."

Thought Questions and Activities

1. Look at one of the tied wire forms. What do you find most striking about the sculpture? What might you add to the sculpture to accentuate this quality?

Figure / Ground
What is in front? What is in back?

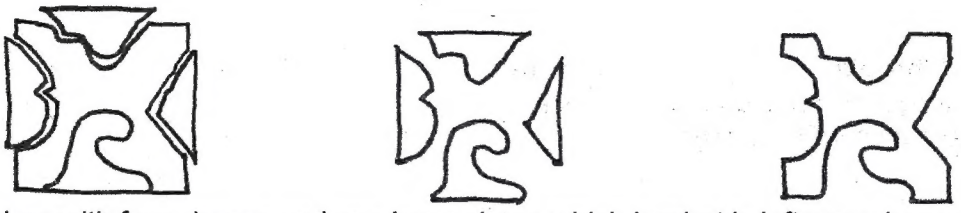
This easy paper project illustrates figure / background and how the figure and the background change from one to the other. It is a free-cutting project. There will be no scraps of paper leftover!

Materials:

3 square pieces of construction paper *in different colors*, cut the same size, at least 6" x 6"
Scissors
Glue

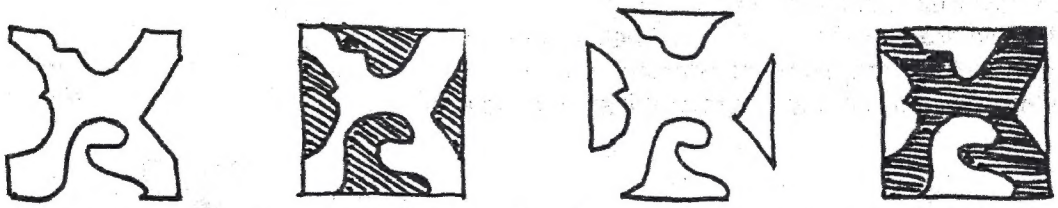
1. Choose three different colors of paper. Choose the one piece you will cut. Put the other two aside.

2. On each edge of the piece of paper you have chosen, cut one shape that starts on one edge and ends on that same edge. Simple abstract shapes work best. Make each shape different.



You should end up with four shapes and one large shape which is what is leftover when you cut the other four shapes. You will use all 5 of these shapes. Keep the pieces in a pile until you are done cutting so your pieces don't get lost or mixed up with your neighbor's pieces.

3. Place the two uncut squares of paper in front of you. Place the largest cut shape so it fits onto one of the two squares of paper.



On the other square of paper, use the four smaller shapes, placing one on each of the 4 edges of the square so the straight edge of each piece lines up with one straight edge of the square. When you decide it looks good to you, carefully glue each piece down onto the squares.

4. Stand back and look at your two different squares. It works best from far away. Ask yourself:

- Which shape is in front (figure) and which shape is in back (background)?
- Can they trade places so the background becomes the figure?
- Does figure / background work better on one square than the other square?

Concluding Observations

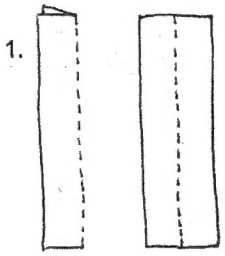
Make note of what you discovered while making your figure/background squares?
Do your two completed squares look similar? Different? Very different? Symmetrical? Asymmetrical?
Did your eyes trick your brain into seeing the background as the figure in front? ....or the figure as background?

Design Your Own Looped Wire Sculpture

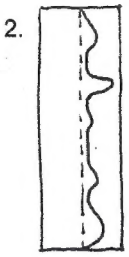
Sometimes Ruth Asawa used sketches to design her sculptures. Other times, she decided how a sculpture would look as she worked with the wire. Here is a simple way to design a looped wire sculpture that has two interlocking shapes. Each interlocking shape was often made with a different kind of wire like brass, copper, iron, aluminum, or galvanized steel. This is a good exercise for drawing symmetrical lines.

Materials: Drawing paper cut into a long rectangle
Pencil
Crayons or colored pencils
Optional: mirrors (I like to have one on hand to help guide students who are having difficulty with symmetry.)

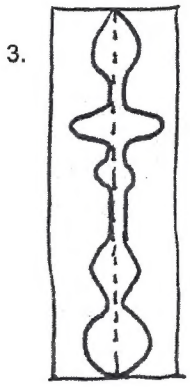
1. Fold paper in half in the long direction, (hot dog fold). Open it up flat on the table.



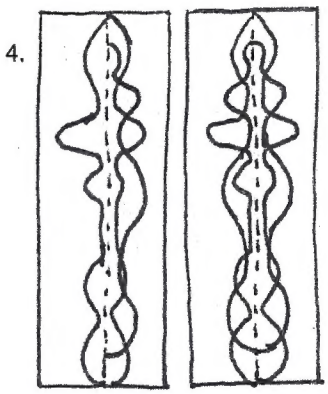
2. On one side of the fold line, use a pencil to draw a curved, undulating line, starting at the top going all the way to the bottom of the paper.



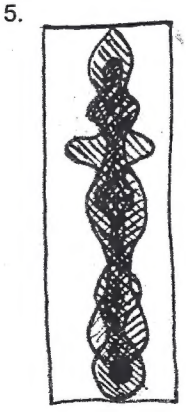
3. On the other side of the fold, draw an undulating line that is symmetrical to the first line. Remember, we are *artists,* not machines. Don't worry if the lines are not perfectly spaced.



4. Using the pencil, draw another undulating line on one side of the fold that is different than the first lines. Make the line intersect the first shape. This will help create an overlapping, interlocking shape for your design. On the *other* side of the fold, draw a line that is symmetrical to the last line you drew.



5. Color in each of your two shapes with two different colors. Where the two colors overlap and mix together, a third color will appear. If you want, add a sphere inside your sculpture to create a third overlapping shape.



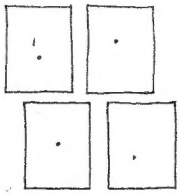
Concluding Observations
How many different shapes do you see? Pay attention to where the forms overlap. What additional shape(s) do you notice where the overlapping occurs?
Was one shape more dominant than the other? What would you change about your shapes?
If you made this out of wire, what two kinds of wire would you use?
Try making two interlocking shapes that are asymmetrical.

Design Your Own Tied Wire Sculpture

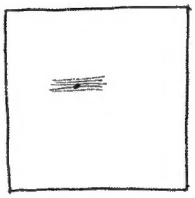
After trying to draw a desert plant and finding it too complicated, Ruth Asawa decided to try making it in wire. After completing her first tied wire sculpture, she was able to draw the original plant. She went on to make many more tied wire sculptures in many shapes and sizes. They are called tied wire sculpture because the groups or bunches of wires were tied together with short pieces of wire. You will design a simple tied wire sculpture by drawing lines that represent wire. Line=Wire

Materials: Paper and pencil

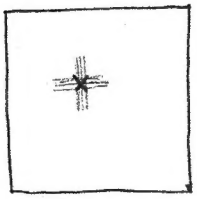
1. Decide where on you paper you want the center of your drawing to be. Draw a dot on that spot. This will be the center of your sculpture. (The dot can be located anywhere on the paper. It would be best if the dot is at least 3" from the edge of the paper. 3" is about as long as your index finger, the one you point with.)

1. 

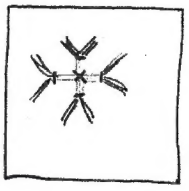
2. Decide how many wires you will use. We will start with 24 wires. How can that number of wires be divided? We'll start by dividing 24 by 2 (24÷2). That will be 12 wires. On top of the dot, draw 12 short parallel horizontal lines the same length. These are the wires.

2. 

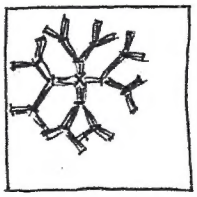
3. Draw 12 lines, perpendicular to the first set of 12 lines. They should be approximately the same length and overlap/cross the first set of wires in the center. Draw a wire tie where the two bunches of wire overlap in the center.

3. 

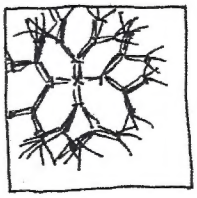
4. Draw a wire tie on each end of the bunches of 12 wires. Divide each of the four bunches of 12 wires in half by drawing 6 lines angled to the left and 6 to the right. What letter do you see?

4. 

5. Divide each new bunch in half and draw the divided wires in the shape of the letter Y . What is 6÷2? Remember to add a wire tie to each bunch of 3 wires.

5. 

6. Draw the last 3 wires that will look like the letter Y with an extra line at the top. This is the last time your wires divide. Did any of your wires overlap other wires or bunches of wire? That is exactly what the original desert plant did. Did any patterns appear as you finished your drawing?

6. 

Concluding Observations

If you were going to make your sculpture out of wire, what kind of wire would you use? Brass? Copper? Aluminum? Why?

When Asawa makes her tied wire sculptures, she starts with very long wires. Using her sketches, she can estimate how long the wires need to be. The sketch lets her know where to divide and bend the wires. Sometimes, during the process, she changes the design and the sculpture ends up looking different than the original sketch. This is one way new design ideas evolve.

Suspended Words

As Asawa experimented with wire, other artists experiment with words to capture their inspiration and ideas. This activity will give your students a chance to express their reactions to Asawa's work and provide their own interpretations.

Writing Materials: Writing Paper
Pencils
Blank Final Draft Paper

Art Materials: Art Paper
Scissors
Glue
2 1/2" long piece of thread (longer it needed)

Writing Prompts

1. Choose a sculpture in the exhibit to view closely.

2. As you view the sculpture, write down all the words and phrases that come to mind. Be sure to view the sculpture from all angles; stand close and then farther away; close one eye, then the other; close both eyes ...count to ten...look once again. From each vantage point, write the words that come to mind.

3. Now take into consideration light, shadows, colors, materials, the use of space, positive/negative. What new words come to mind? Write the new words too.

4. By now you probably have a whole page of words and ideas. Look them over and see if a theme or unifying idea appears. This may not happen until you begin to write-that's ok.

5. Sit quietly and review your words. Write a poem (non-rhyming) that expresses a feeling or thought you have after viewing the sculpture you chose.

6. If it helps, just write sentences or a paragraph.

7. Once your idea has formed into a poem, review your phrases and words and make any changes that enhance your thoughts.

Sculpting Words

You may choose to create a poem with words suspended on the flat surface of a page or create a three dimensional sculpture akin to Asawa's forms.

One-Dimensional

1. Think about how you want to transfer your words onto a fresh piece of paper. Now that you have your poem, suspend and arrange your words on the page, creating ribbons of words that twist and wind, making use of the space on your page in an unusual way, causing your reader to think about your words by the way you suspend them.

Two-Dimensional

1. You will need 2 of each shape. Either create one shape and trace the second or cut two shapes at one time. Each mobile should have at least four separate shapes or designs. Think about the visual connections between your words and the shapes you use. Copy each section or stanza of your poem onto each of the different shapes.

2. Tape on piece of thread to your desk or working table, placing a piece of tape at the top and bottom to safely secure.

3. Slide one shape under the thread and place glue on exposed surface. Place second similar shape on top of glued piece, gluing the two pieces together. Repeat this process for each of your shapes.

4. After the glue has dried, you are now ready to suspend your words in your classroom.